STATE OF MAINE

DEPARTMENT OF MARINE RESOURCES

IN THE MATTER OF THE APPLICATION OF BABE AND SHAINE STANLEY D/B/A SHABA SHELLFISH CO. FOR) AN AQUACULTURE LEASE LOCATED SOUTH OF) BEAN ISLAND IN SORRENTO, HAN COCK COUNTY,) MAINE

FINDINGS OF FACT, CONCLUSIONS OF LAW AND DECISION

On October 3, 2002 Babe and Shain Stanley, d/b/a Shaba Shellfish Company, of Gouldsboro, Maine applied for an aquaculture lease totaling 10 acres in the coastal waters of the State of Maine, located south of Bean Is land in Sorrento, Hancock County, Maine. The applicant requested the lease for a term of ten (10) years for the purpose of cultivating blue mussels (*Mytilus edulis*) and sea scallops (*Placopecten magellanicus*) using suspended culture techniques. The application was accepted as complete on December 19, 2002. A public hearing on this application was held on March 30, 2004 at 6:00 p.m. in Sorrento. Intervenor status was granted to Conservation Law Foundation (hereafter referred to as CLF), represented by Roger Fleming (hereafter referred to as Intervenor Fleming).

Approval of aquaculture leases is governed by 12 M.R.S.A. §6072. This statute provides that a lease may be granted by the Commissioner of the Department of Marine Resources (DMR) if it is determined that the project will not unreasonably interfere with the ingress and egress of riparian owners; navigation; fishing or other uses of the area, taking into consideration the number and density of aquaculture leases; significant wildlife habitat and marine habitat or the ability of the site and surrounding marine and upland areas to support ecologically significant flora and fauna; or the use or enjoyment within 1,000 feet of municipally, state or federally owned beaches, parks, or docking facilities. The Commissioner must also determine that the applicant has demonstrated that there is an available source of organisms to be cultured for the lease site and that the lease will not result in an unreasonable impact from noise or lights at the boundaries of the lease site.

Evidence Introduced Concerning the Nature

and Impact of the Proposed Lease

The evidentiary record before the Department regarding this lease application includes the Department file (Exhibit 1), including the application (Exhibit 2) and the Department site report (Exhibit 3), and the record of the March 30, 2004 public hearing. At the public hearing, testimony was given by the applicant, Babe Stanley, the Department's Aquaculture Environmental Coordinator, Jon Lewis, Intervenor Fleming and three members of the public.

Babe Stanley, the vice president of Shaba Shellfish Co., (hereafter referred to as the applicant), testified regarding the lease application. According to the application and the testimony by the applicant, the proposed aquaculture lease is sought to raise blue mussels and sea scallops. The applicant requested a lease site totaling 10 acres and a lease term of ten (10) years. The proposed lease activities would consist of growing mussels on dropper ropes suspended from rafts that would be submerged 10 feet below the surface. The applicant testified that they have conducted research to develop a method to submerge a mussel raft. He stated that they have been working with the University of Maine, CLF and residents of Sorrento in developing the technology. He testified that in the first year of the lease they would deploy a prototype, 20' x 20' raft. If that is successful, they would deploy a full-size 40' x 40' raft in the second year and build up from there in subsequent years. The applicant proposes a maximum of twenty 40' x 40' rafts on the proposed lease site. The rafts would be submerged and surfaced by regulating the amount of air in the pontoons of the rafts. The applicant testified that each raft would have four corner buoys at the surface. The buoys would be made of Styrofoam, would measure 20" square and 10' in height, and would be marked in one-foot increments in order to determine whether the raft is level under the surface. The applicant testified that when the raft is first deployed, the buoys would be five feet above the surface. After the raft is in the water for approximately one month and it is stable, the applicant stated that he could removed a few feet from the buoys, thus only having one to three feet of the buoys above surface. The rafts would also contain predator nets down each side and across the top. The applicant testified that the

benefits to submerging the mussel rafts include less exposure to rough seas, less visual impact and less interference with navigation. According to the applicant, the prototype submerged raft that was tested at the University of Maine handled well in 8 foot waves. Additionally, the applicant testified that the mussels should feed better with less movement. The applicant testified that the University of Maine has committed to continue working with the applicant to perfect the technology, until the applicant has successfully harvested mussels from a full-size raft.

The applicant testified that seeding the rafts would generally take place in May and June, depending upon seed availability. The ropes would be seeded using a socking machine and it would take approximately 2 days to seed one raft. According to the application, harvesting would occur approximately one year after seeding and would consist of lifting the ropes with a crane and basket, then washing, separating and grading the mussels. In order to harvest the raft, it would be brought to the surface. The applicant testified that as part of his agreement with CLF, he has agreed that during the period from June 1st through September 15th of each year, the rafts may only be surface from sunrise until 11:00 am, except in the case of an emergency. The applicant testified that sailing in the area of the proposed lease site does not begin until after 11:00 am. According to the application, the applicant expects to visit the site 3-5 days per week in a fishing vessel to monitor and operate the lease site. The applicant testified that they would access the site from Jellison Cove in the summer and the Hancock Point Yacht Club in the winter. Additionally, the applicant testified that they would not use the shore of Bean Island as part of the lease operations and would keep the shore free of debris.

Additionally, the applicant proposes to grow sea scallops in cages on the bottom of the lease site. Each cage would be 4' x 4' x 10' and would sit one foot off of the bottom. There would be a maximum of 200 cages on the proposed lease site, beginning with 20 cages in the first year. According to the application, thinning, grading and cleaning activities would generally occur once per month. Harvesting would occur after four years growth and would consist of

raising the cages to the surface. According to the application, scallops may also be earhung from ropes suspended from the mussel rafts.

According to the application, the applicant does not plan to use lighting at the lease site other than those required for navigation aids. The only power equipment that would be used on the lease site would be a 40' boat, a 16' outboard boat, and the seeding and harvesting barge. According to the application, mufflers would be used to reduce the noise levels from the lease activities. Additionally, according to the application, mussel seed would be obtained from Tight Rope Sea Farm in Brooklin, Maine, or by collecting mussel spat on the lease site, and sea scallop seed would be obtained from a Maine hatchery such as Pemaquid Oyster Company.

In accordance with Department regulations, Chapter 2.10(3), the applicant provided an environmental characterization of the proposed lease area. According to the application, the bottom of the proposed lease site consists of soft sediments. The water depth is estimated to be 60-70 feet at low water. The current flow is estimated to be less than 1 knot, and flows in an east/west direction. According to the application, resident fauna include rock crabs, starfish and eels. The applicant testified that he chose this site because of the high levels of phytoplankton. He stated that he measured the phytoplankton in the area and the level of phytoplankton was very high in the proposed lease site. Additionally, according to the application, the proposed lease site does not fall within an Essential or Significant Wildlife Habitat.

According to the application, there are no riparian landowners within 1,000 feet of the proposed site, as the proposed site is located 2,750 feet from Bean Island. According to the applicant, navigational use of the proposed lease site consists of recreational and commercial boaters. The applicant testified that because the rafts will be submerged, boaters can traverse the lease site, and therefore the lease activities will not impede navigation. The applicant included letters from Marine Patrol Officer Michael Pinkham and Sorrento Harbormaster Dwight Freeman. According to MPO Pinkham and Mr. Freeman, the submerged rafts will not interfere with boat traffic in the area. Mr. Freeman states that vessels drawing ten feet or more rarely, if ever, navigate the area of the proposed lease, thus ten feet is sufficient clearance for traffic in the

area. According to the application, there are no known mooring owners, fishermen or draggers who actively use the proposed lease site, and there is minimal commercial lobster fishing due to the soft mud bottom.

The Department's Aquaculture Environmental Coordinator (AEC) and his assistant conducted a site visit at the proposed lease area on June 9, 2003. During the site visit, a diver survey, utilizing an underwater video camera, was performed. The AEC created a site report summarizing the information obtained during the site visit and provided testimony regarding the site report at the public hearing. The AEC also observed a test of the submerged raft at the University of Maine test tank. He took video footage of the test and showed the video at the hearing. The video demonstrated how the raft performed in simulated 4' and 8' waves.

According to the report and the AEC's testimony, the proposed site is located south of Bean Island in the town of Sorrento, in water depths ranging from approximately 68.5 feet at mean low water (MLW) to 78.9 feet at mean high water (MHW). The bottom topography of the proposed lease consists of very soft mud. According to the AEC's report, currents are tidally driven in a northwest/southeast direction. Local flora and fauna observed at the site include wrymouth eels, bent mysid, boreal red shrimp, sea stars, crabs, small patches of blue mussels, and unattached knotted wrack. The AEC testified that there should be less mussel drop-off on the proposed lease site because the raft will be submerged, thus creating less disturbance to the growing mussels. According to the AEC's report the proposed lease is located in an area classified as open for the harvest of shellfish by the Department's Water Quality Division. Additionally, according to the AEC's report, the proposed lease site is not located within an Essential or Significant Wildlife Habitat.

According to the AEC, no moorings were observed within the boundaries of the lease area during the site visit. There is a minimum of 2,550 feet between the proposed site and any surrounding shore. Thus, according to the AEC, the proposed activities will not unreasonably interfere with riparian access. Additionally, according to the AEC, the proposed activities will not interfere with navigation in the area. The proposed lease site is centrally located between

Hancock and Bean Points at the mouth of Sullivan Harbor. There are approximately 3,669 feet of navigable waters to the west, 2,200 feet of navigable waters to the east and 2,550 feet of navigable waters to the north of the proposed lease site. According to the AEC, recreational boating and sailing are expected in the area. However, the AEC stated that because the applicant is proposing to submerge the mussel rafts, any navigational concerns are eliminated.

According to the AEC's report, no commercial or recreational fishing was observed within the boundaries of the proposed lease site during the site visit. Approximately twenty lobster trap buoys were observed to the north of the proposed lease site. According to the report, the proposed lease activities are not expected to interfere with fishing in the area. The nearest aquaculture lease site is located 1.35 miles to the southeast of the proposed lease site. Additionally, according to the report, MPO Pinkham stated that the proposed lease activities would not interfere with other uses of the area. According to MPO Pinkham, the majority of traffic heading into or out of Sullivan Harbor runs to the east and west of the proposed lease site.

Intervenor Fleming testified that CLF supports the application. He testified that, separately, the applicant has agreed with CLF that all aquaculture rafts would be submerged 10 feet below the surface, except for associated lines, buoys and hoses; that from June 1st through September 15th of any year, the rafts would not be surfaced unless for emergency situations or between the hours of sunrise and 11:00 am; that the buoys associated with the rafts would be as inconspicuous as possible; and that the applicant would not use the shore of Bean Island or other islands in the area, and would collect any debris from the aquaculture operation. In return, CLF agreed to support the application, provide funding for a prototype raft and assist in the development of technology. Mr. Fleming testified that he supports the proposed project because it accommodates the concerns of those who sail in the area.

Three members of the public also provided testimony. One person testified that the lease should be an experimental lease, not a standard lease for ten years. Two members of the public testified in general support of the application.

Findings of Fact

The proposed lease is located 2,550 feet south of Bean Island, midway between Hancock and Bean Points, in Sorrento. There are no riparian landowners within 1,000 feet of the proposed lease site. There are no moorings or docks located in or near the proposed lease area. The proposed lease activities will not interfere with access to riparian land. Based on this evidence, I find that the lease will not unreasonably interfere with the ingress and egress of riparian owners.

The proposed lease is located in water depths of approximately 60-70 feet at low water, approximately 2,550 feet from the nearest point of land. The mussel rafts will be submerged 10 feet below the surface and will only be on the surface for seeding, harvesting and in emergency situations. Ten feet is sufficient clearance for vessels that traverse the area. The applicant has agreed that from June 1st to September 15th, the rafts will only be on the surface from sunrise until 11:00 am, or in the case of an emergency. Additionally, the four buoys associated with each raft will be made of Styrofoam and will be a maximum of five feet above the surface. Based on the foregoing, I find that the proposed lease will not unreasonably interfere with navigation.

There is no commercial or recreational fishing in the proposed lease site. Lobster fishing in the area occurs between the proposed site and Bean Island. The nearest existing aquaculture lease is located 1.35 miles to the southeast of the proposed lease. The proposed lease site is used by recreational boaters and sailors. The gear associated with the lease operations will be submerged 10 feet below the surface, except for associated buoys and lines, thus allowing for the passage of vessels through the lease site. The area of the proposed lease is classified as open for the harvest of shellfish. I find that the proposed lease will not unreasonably interfere with fishing or other uses of the area.

Existing flora and fauna observed at the proposed site consists of wry-mouth eels, bent mysid, boreal red shrimp, sea stars, crabs, blue mussels, and unattached knotted wrack. There are no Essential or Significant Wildlife Habitats located within the proposed lease site. The current is estimated to be less than 1 knot. Because the rafts will be submerged, the dropper

ropes will experience less movement and mussel drop-off from the ropes should thus be limited. The area of the proposed lease site is rich in phytoplankton. Based on this evidence, I find that the proposed activities will not unreasonably interfere with significant wildlife habitat and marine habitat or with the ability of the site and surrounding marine and upland areas to support ecologically significant flora and fauna.

All mussel seed will be obtained from Tight Rope Sea Farm in Brooklin, Maine or by collecting spat seed on the lease site. All sea scallop seed will be obtained from a Maine hatchery such as Pemaquid Oyster Company in Waldoboro, Maine. Based on this evidence, I find that there is an available source of blue mussels and sea scallops.

The proposed lease site is not located within 1,000 feet of any municipally, state, or federally owned beaches, parks, or docking facilities. Based on this evidence, I find that the proposed lease site activities will not unreasonably interfere with public use or enjoyment within 1,000 feet of any municipally, state, or federally owned beaches, parks, or docking facilities.

Equipment used at the site would consist of a 40' and 16' boat and the seeding and harvesting vessels. The applicant would be at the site 3-5 days per week. From June 1st to September 15th, the applicant would only seed or harvest the rafts from sunrise until 11:00 am. All equipment used on site would be muffled to reduce noise impacts. Additionally, lighting will not be used at the lease site. I find that the proposed lease will not result in an unreasonable impact from noise or lights at the boundaries of the lease site.

Conclusions of Law

Based on the above findings, I conclude that:

1. The aquaculture activities proposed for this site will not unreasonably interfere with the ingress and egress of any riparian owner;

- 2. The aquaculture activities proposed for this site will not unreasonably interfere with navigation;
- 3. The aquaculture activities proposed for this site will not unreasonably interfere with fishing or other uses of the area, taking into consideration the number and density of aquaculture leases in the area;
- 4. The aquaculture activities proposed for this site will not unreasonably interfere with significant wildlife habitat and marine habitat or with the ability of the site and surrounding marine and upland areas to support ecologically significant flora and fauna;
- 5. The applicant has demonstrated that there is an available source of blue mussels and sea scallops;
- 6. The aquaculture activities proposed for this site will not unreasonably interfere with public use or enjoyment within 1,000 feet of municipally, state or federally owned beaches, parks, or docking facilities; and
- 7. The aquaculture activities proposed for this site will not result in an unreasonable impact from noise or lights at the boundaries of the lease site.

Accordingly, the evidence in the record supports a finding that the proposed aquaculture activities meet the requirements for the granting of an aquaculture lease set forth in 12 M.R.S.A. §6072.

Decision

Based on the foregoing, the Commissioner grants the applicant's requested aquaculture lease of 10 acres from the date of this decision for the purpose of cultivating blue mussels (*Mytilus edulis*) and sea scallops (*Placopecten magellanicus*) using suspended culture techniques. The applicant shall pay the State of Maine rent in the amount of \$50.00 per acre per year. The applicant shall post a bond or establish an escrow in the amount of \$5,000 conditioned upon its performance of the obligations contained in the aquaculture lease documents and all applicable statutes and regulations.

Conditions to be Imposed on Lease

The Commissioner may establish conditions that govern the use of the lease area and impose limitations on aquaculture activities. Conditions are designed to encourage the greatest

multiple, compatible uses of the lease area, while preserving the exclusive rights of the lessee to the extent necessary to carry out the purposes of the aquaculture law.

The following conditions are placed on this lease:

- (1) navigation, lobster fishing and recreational boating and fishing shall be allowed in the open areas of the lease;
- (2) the lease area shall be marked in accordance with U.S. Coast Guard and Department of Marine Resources regulations Chapter 2.80
- (3) all mussel rafts shall be submerged 10 feet below the surface, except during deployment, seeding, harvesting, equipment repairs, or in the case of an emergency. This shall not include buoys, lines and hoses associated with the rafts;
- (4) from June 1st to September 15th of each year, the rafts shall only be on the surface during the hours between sunrise and 11:00 am, except in the case of an emergency; and
- (5) the leaseholder shall not use the shore of Bean Island or other nearby islands in relation to the aquaculture activities, and shall remove all debris resulting from the lease operations from the surrounding waters and shores.

The Commissioner may commence revocation procedures if he determines that substantial aquaculture has not been conducted within the preceding year or that the lease activities are substantially injurious to marine organisms. If any of the conditions or requirements imposed in this decision, in the lease, or in the law are not being observed, the Commissioner may revoke the aquaculture lease.

| Dated: | |
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| | George D. Lapointe (Commissioner) |
| | Department of Marine Resources |